

What is Claimed is:

1. A method for cleaning a tub of a washing machine, comprising the steps of:
supplying water to a tub without introduction of laundry into the tub;
washing for the first time for permeation of water into contaminants, and
5 removal of contaminants lightly stuck to a surface of the tub;
soaking the contaminants for a predetermined time period;
washing for the second time for separating soaked contaminants from the
surface of the tub; and
draining water from the tub.
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2. A method for cleaning a tub of a washing machine, comprising the steps of:
supplying water to a tub without introduction of laundry into the tub;
washing for the first time for permeation of water into contaminants, and
removal of contaminants lightly stuck to a surface of the tub;
15 soaking the contaminants for a predetermined time period;
washing for the second time for separating soaked contaminants from the
surface of the tub;
draining water from the tub; and
supplying water to the surface of the tub during draining for preventing the
20 contaminants from sticking to the surface of the tub again.
3. A method for cleaning a tub of a washing machine, comprising the steps of:
supplying water to a tub without introduction of laundry into the tub;
washing for the first time for permeation of water into contaminants, and
25 removal of contaminants lightly stuck to a surface of the tub;

- soaking the contaminants for a predetermined time period;
- washing for the second time for separating soaked contaminants from the surface of the tub;
- draining water from the tub for the first time;
- 5 supplying water to the surface of the tub during the step of draining water from the tub for the first time for preventing the contaminants from sticking to the surface of the tub again;
- supplying water to the tub for the second time;
- rinsing the surface of the tub; and
- 10 draining water from the tub for the second time.

- 4. A method for cleaning a tub of a washing machine, comprising the steps of:
 - supplying water to a tub without introduction of laundry into the tub;
 - washing for the first time for permeation of water into contaminants, and
 - 15 removal of contaminants lightly stuck to a surface of the tub;
 - soaking the contaminants for a predetermined time period;
 - washing for the second time for separating soaked contaminants from the surface of the tub;
 - draining water from the tub for the first time;
 - 20 supplying water to the surface of the tub during the step of draining water from the tub for the first time for preventing the contaminants from sticking to the surface of the tub again;
 - supplying water to the tub for the second time;
 - rinsing the surface of the tub;
 - 25 draining water from the tub for the second time, and

supplying water to the surface of the tub during the step of draining water from the tub for the second time for preventing the contaminants from sticking to the surface of the tub again.

- 5 5. A method for cleaning a tub of a washing machine, comprising the steps of:
supplying water to a tub without introduction of laundry into the tub;
washing for the first time for permeation of water into contaminants, and
removal of contaminants lightly stuck to a surface of the tub;
soaking the contaminants for a predetermined time period;
10 washing for the second time for separating soaked contaminants from the
surface of the tub;
draining water from the tub for the first time;
supplying water to the surface of the tub during the step of draining water from
the tub for the first time for preventing the contaminants from sticking to the surface of
15 the tub again;
supplying water to the tub for the second time;
rinsing the surface of the tub;
draining water from the tub for the second time;
supplying water to the surface of the tub during the step of draining water from
20 the tub for the second time for preventing the contaminants from sticking to the surface
of the tub again; and
rotating the tub at a high speed for removing water from the surface of the tub.

6. The method as claimed in any one of claims 1 to 5, further comprising the
25 step of rotating the tub during water is supplied to the tub.

7. The method as claimed in any one of claims 1 to 5, wherein the step of washing is performed by rotating a pulsator provided in the tub for forming a water circulation.

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8. The method as claimed in any one of claims 1 to 5, wherein the step of washing is performed by rotating the tub for forming a water circulation.

9. The method as claimed in any one of claims 1 to 5, wherein the step of washing is performed by rotating the tub at a high speed for forming a water circulation moving in a radial direction of the tub.

10. The method as claimed in any one of claims 1 to 5, wherein the step of washing is performed in combination of at least two methods selected from a method for rotating the pulsator, a method for rotating the tub at a low speed, and a method for rotating the tub at a high speed.

11. The method as claimed in any one of claims 2 to 5, wherein the step of supplying water to the surface of the tub is performed in a later half of the step for draining.

12. The method as claimed in any one of claims 2 to 5, wherein the step of supplying water to the surface of the tub is performed by a method in which the tub is rotated while water is supplied to the tub.

13. The method as claimed in any one of claims 2 to 5, wherein the step of supplying water to the surface of the tub is performed by a method in which water is sprayed to the surface of the tub.

5 14. The method as claimed in any one of claims 1 to 3, further comprising the step of rotating the tub at a high speed for removing water from the surface of the tub.

15 15. The method as claimed in any one of claims 1 to 5, further comprising the step of introducing bleaching agent into the tub before washing for the first time.

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16. The method as claimed in claim 15, wherein the bleaching agent is an oxygen group bleaching agent.

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17. The method as claimed in claim 15, wherein the bleaching agent is a halide group bleaching agent.

18. The method as claimed in any one of claims 1 to 5, further comprising the step of introducing one or more than one sterilizing agent, and fungicidal agent.

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19. The method as claimed in claim 18, wherein the sterilizing agent is halogenated hydantoin compound that emits hypohalogenated acid.

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20. The method as claimed in any one of claims 1 to 5, further comprising the step of displaying that a tub cleaning course is under progress on a display of the washing machine during performance of the steps of tub cleaning.

21. The method as claimed in any one of claims 1 to 5, further comprising the step of displaying an accumulated number of washing times after the steps of tub cleaning are finished on a display of the washing machine.

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22. The method as claimed in any one of claims 1 to 5, further comprising the step of displaying an accumulated number of washing times after the steps of tub cleaning are finished, and target number of washing times on a display of the washing machine.

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23. The method as claimed in claim 22, wherein the target number can be changed as a user likes.

24. The method as claimed in claim 22, wherein the steps of tub cleaning are performed when the user selects the tub cleaning course manually at a time the accumulated number of washing times reaches to the target number of washing times.

25. The method as claimed in claim 22, wherein the steps of tub cleaning is performed automatically at a time the accumulated number of washing times reaches to the target number of washing times.

26. The method as claimed in any one of claims 1 to 5, further comprising the step of setting one of modes selected from a mode in which the user manually selects a tub cleaning course to progress the steps of tub cleaning at a time the accumulated number of washing times displayed on the display of the washing machine reaches to

the target number of washing times required for the tub cleaning, and a mode in which the steps of tub cleaning are progressed automatically.

27. The method as claimed in any one of claims 1 to 5, further comprising the
- 5 step of the user setting a reserved time so that the steps of tub cleaning is performed automatically if the set reserved time is reached.